WE CLAIM

1. A viral vector comprising an E2F responsive transcriptional nucleotide regulatory site that controls the expression of a viral gene.

2. A viral vector as described in claim 1 wherein said viral gene is an immediate early gene.

3. A viral vector as described in claim 2 wherein said viral vector is adenovirus.

4. A viral vector as described in claim 3, wherein said transcriptional nucleotide regulatory site is a promoter.

5. A viral vector as described in claim 4, wherein said E2F responsive promoter is substituted for an endogenous adenoviral E1a promoter.

6. A viral vector as described in claim 4, wherein said E2F responsive promoter is substituted for an endogenous adenoviral E4 promoter.

7. A viral vector as described in claim 6, wherein said viral vector further comprises nucleotide regulatory sites that substantially facilitate viral replication comprising Sp1, ATF, NF1 and NFIII/Oct-1.

8. An viral vector comprising a viral transcriptional nucleotide regulatory site that controls the expression of a viral gene, wherein said site is inactivated by the insertion of an E2F responsive transcriptional nucleotide regulatory site such that said E2F responsive transcriptional nucleotide regulatory site controls the expression of said viral gene.

9. A viral vector as described in claim 8 wherein said viral gene is an immediate early gene.

10. A viral vector as described in claim 9 wherein said viral vector is adenovirus.

11. A viral vector as described in claim 10, wherein said inactivated transcriptional nucleotide regulatory site is a promoter.

12. A viral vector as described in claim 11, wherein said inactivated transcriptional nucleotide regulatory site is an endogenous adenoviral E1a promoter.

13. A viral vector as described in claim 11, wherein said inactivated transcriptional nucleotide regulatory site is an endogenous adenoviral E4 promoter.

14. A viral vector as described in claim 11, wherein said inactivated transcriptional nucleotide regulatory site comprises both an endogenous adenoviral E1a and E4 promoters.

15. An viral vector as described in claims 1 or 8, wherein said transcriptional nucleotide regulatory sequence that is E2F responsive is human E2F-1.

16. A method for killing cancer cells in the presence of normal cells, comprising the steps of: contacting under infective conditions (1) an viral vector as described in claims 1 or 8 with (2) a cell population comprising cancer and normal cells, and allowing sufficient time for said virus to infect said cell population.